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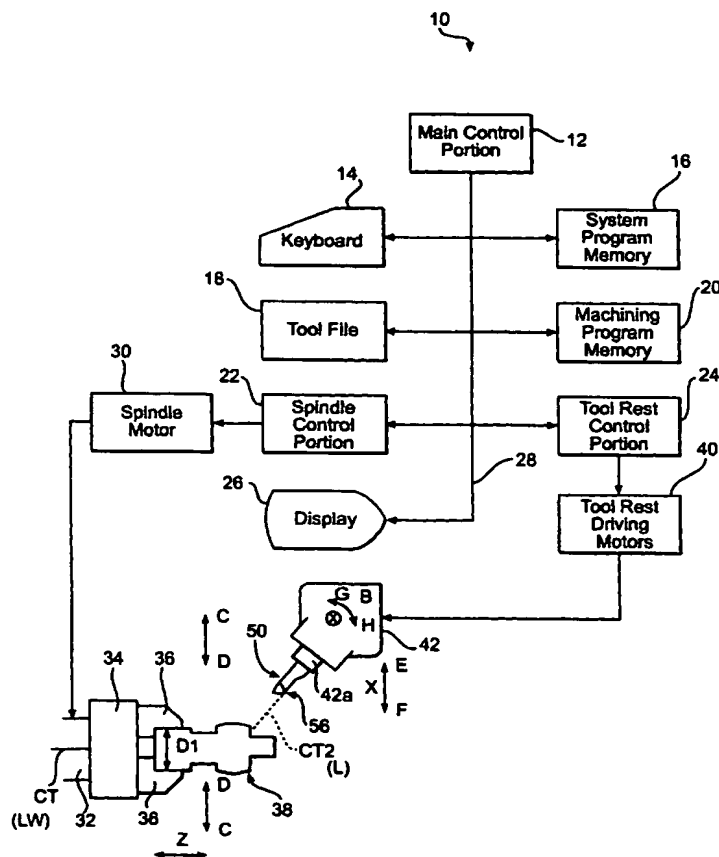
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(54) Title: TOOLHOLDER



(57) Abstract: A toolholder (50) with a controllable critical angle, such as a lead, trailing, rake or clearance angles, includes a tool spindle (42a) for retaining the toolholder in a tool rest (42) of a machine tool. The machine tool (10) includes at least one linear axis, for example, three mutually perpendicular axes, a rotary axis and a rotation axis. The rotary axis and/or rotation axis is controllable to move to a specified position in synchronization with a movement of one of the linear axes. An adaptor (54) supports a cutting tool (56) that is retained in the adaptor by a clamp (58). The cutting tool (56) defines a critical angle, such as a lead angle, a trailing angle, a rake angle and a flank clearance angle, wherein the critical angle is corrected as a vector of movement of at least one of the linear axis is changed. In addition, the cutting tool (56) can be positioned on opposite side of a centerline of rotation of the workpiece to effectively double the life of the cutting tool. A method of controlling a toolholder (50) is also disclosed.

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